

Reply to Office Action of September 17, 2007

REMARKS/ARGUMENTS

Claims 5-16, and 18-25 are pending in this application. By this Amendment, the Abstract, drawings, and claims 5-10, 16, 18, 20-21, 23, and 25 are amended, and claims 1-4, 17, and 26 are canceled without prejudice or disclaimer. No new matter is added. Support for the claims can be found throughout the specification, including the original claims and the drawings. Withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

The Office Action objected to claims 1, 3, 4, 7, 10, 17, 18, 20, 21, and 26 because of informalities. Claims 1, 3, 4, 17, and 26 have been canceled. The pending claims have been amended to address the Examiner's comments. Accordingly, withdrawal of the objection is respectfully requested.

The Office Action rejected claims 4, 8, 9, 17, 20 and 26 under 35 U.S.C. §112, second paragraph, as being allegedly indefinite. Claims 4, 17, and 26 have been canceled. The pending claims have been amended to address the Examiner's comments. Accordingly, withdrawal of the rejection is respectfully requested.

The Office Action rejected claims 1-3 and 5-7 under 35 U.S.C. §102(b) over PCT Patent Publication No. WO 02/02944 A1 to Brabek (hereinafter "Brabek"); rejected claims 1-3, 5, and 8-9 under 35 U.S.C. §102(b) over U.S. Patent No. 6,152,017 to Harrer et al. (hereinafter "Harrer"); rejected claim 4 under 35 U.S.C. §103(a) over Harrer, in view of U.S. Patent No. 2,863,707 to Lengnick (hereinafter "Lengnick"); rejected claim 11 under 35 U.S.C. §103(a) over

Riffe, in view of U.S. Patent No. 6,623,258 to Iversen et al. (hereinafter "Iversen"); rejected claims 18 and 22 under 35 U.S.C. §103(a) over Harrer, in view of Riffe; and rejected claim 20 under 35 U.S.C. §103(a) over Harrer, in view of Riffe, and further in view of Lengnick. These rejections are moot in view of the amendments discussed below.

The Office Action rejected claims 10 and 12-15 under 35 U.S.C. §102(b) over U.S. Patent No. 5,149,254 to Riffe (hereinafter "Riffe"), and rejected claims 16 and 17 under 35 U.S.C. §103(a) over Riffe. Independent claim 10 has been amended to include the features of dependent claim 17, and claim 17 has been canceled. These rejections are respectfully traversed in so far as they apply to the pending claims.

That is, independent claim 10 has been amended to recite, *inter alia*, wherein the projection has a relationship of $0.3 < (h/d) < 0.5$ between a top end diameter (d) thereof and a height (h) thereof. Riffe does not disclose or suggest such features, or the claimed combination of independent claim 10.

That is, the Examiner acknowledges that Riffe does not disclose such features. The Examiner then asserts that such features would have been an obvious design choice. However, as stated in the specification, projection 240 having a height (h) greater than 0.3 times and smaller than 0.5 times the top diameter (d) thereof allows the working fluid compressed in the compression chamber 110 to be discharged through the discharge hole 321 more smoothly, and pulsation and noise of the working fluid reduced. Thus, Applicants respectfully submit that such features solve a stated problem, and would not merely have been an obvious design choice.

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Accordingly, the rejection of independent claim 10 over Riffe should be withdrawn. Dependent claims 11-16 are allowable over Riffe in view of their dependency on independent claim 10, as well as for their added features.

The Office Action rejected claims 18, 19, 21 and 23-24 under 35 U.S.C. §103(a) over Brabek, in view of Riffe, and rejected claims 25 and 26 under 35 U.S.C. §103(a) over Brabek, in view of Riffe, and further in view of Design Choice. Independent claim 18 has been amended to include the features of dependent claim 26, and claim 26 has been canceled. These rejections are respectfully traversed in so far as they apply to the pending claims.

That is, independent claim 18 has been amended to recite, *inter alia*, wherein the projection has a relationship of $0.3 < (h/d) < 0.5$ between a top end diameter (d) thereof and a height (h) thereof. Brabek and Riffe do not disclose or suggest such features, or the claimed combination of independent claim 18.

That is, the Examiner acknowledges that Brabek and Riffe do disclose such features. The Examiner then asserts that such features would have been an obvious design choice. However, as stated in the specification, providing projection 240 with a height (h) greater than 0.3 times and smaller than 0.5 times the top diameter (d) thereof allows the working fluid compressed in the compression chamber 110 to be discharged through the discharge hole 321 more smoothly, and pulsation and noise of the working fluid reduced. Thus, Applicants respectfully submit that such features solve a stated problem, and would not merely have been an obvious design choice.

Accordingly, the rejection of independent claim 18 over Brabek and Riffe should be

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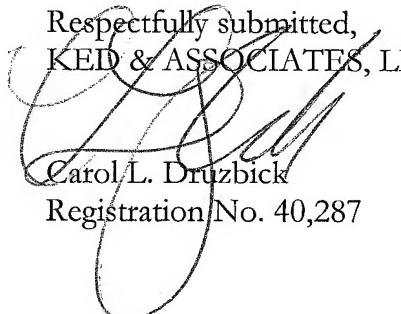
withdrawn. Dependent claims 5-9, and 19-25 are allowable over Brabek and Riffe in view of their dependency on independent claim 18, as well as for their added features.

IV. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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